

Integrated Research on Coupled Human Environmental Systems



Land Open Science Conference

**2-5 December, 2003
Morelia, Mexico**

Introduction

The Land Project will hold its first Open Science Conference 2-5 December, 2003 in Morelia, Mexico. The purpose of the conference is to bring together the research communities dealing with global change science related to land use/cover changes, terrestrial ecosystems, and aquatic ecosystems on land. The science plan and implementation strategy for the new Land project of IGBP and IHDP will be presented and discussed. There will be a preceding Global Change and Terrestrial Ecosystems (GCTE) symposium on 1 December.

The notion of coupled human-environment systems is central to the research agenda for Land. It refers to the network of interactions between human, biological, and environmental components of systems on land. It is applied by studying in an integrative fashion the reciprocal relations of people with biophysical-biogeochemical processes and with biota, and how their modifications feedback to global environmental changes to affect the sustainability of the overall system. The choices that humans make about land use depend on the complex interaction between demographic, socio-economic, institutional, physical, biogeochemical, and biological factors.

Clarifying how environmental change and its impacts on terrestrial ecosystems contribute to these choices and land management decisions remains a challenge to global change science. The development of an integrated perspective to understand these interactions among social and ecosystem processes is needed to further understand the impacts and feedbacks of Global Environmental Change.

Objectives

The overall objectives of the Land project are: 1) Identifying the agents of change in coupled human-environment systems on land, and quantifying the magnitude of their effects on the dynamics of the coupled system; 2) Assessing how the provision of ecosystem goods and services are affected by these changes; 3) Describing the characteristics and dynamics of vulnerability of coupled human-environment systems on land. The science plan currently identifies three research themes to organize our efforts to meet these objectives:

- The causes and nature of land system change
- The consequences of land system change;
- Integrating analysis and modelling for sustainable land uses

Land research will encompass pre-existing networks and activities from the Global Change and Terrestrial Ecosystems (GCTE) project, the Land Use/Cover Change (LUCC) project, and where appropriate other projects of the sponsor programmes: the International Geosphere-Biosphere Programme (IGBP) and the International Human Dimensions Programme (IHDP); new networks and other research activities on new topics; and partnerships with other projects within the Earth System Science Partnership (ESSP) and beyond.

Preliminary Program and Abstract Submission

The preliminary programme will be made available shortly on <http://www.oikos.unam.mx/landOSC>. Further details on abstract submission will be made available at the end of August on the above website.

Conference Themes

- Coupled human environmental system
- Decision making with global environmental change
- Land dynamics under multiple stressors
- Coupled biogeochemical cycles
- Aquatic ecosystem interface with the coupled system
- Vulnerability of mountain resources
- Agroecosystems and global change
- Human dominated landscapes
- Sustainability of ecosystem goods and services

Registration

Prior to 31 October

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|-----------------------------|---------|
| GCTE Symposium [1 December] | US\$ 50 |
| GCTE Symposium [student] | US\$ 35 |
| LAND OSC [2-4 December] | US\$200 |
| Land OSC [student] | US\$100 |

After 31 October

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|-----------------------------|---------|
| GCTE Symposium [1 December] | US\$ 75 |
| GCTE Symposium [student] | US\$ 50 |
| Land OSC [2-4 December] | US\$250 |
| Land OSC [student] | US\$150 |

To register, please download the registration form from the following webpage: <http://www.oikos.unam.mx/landOSC> or in case of failure, go to a mirror site <http://cuencas.oikos.unam.mx/landOSC>

Hotels

A travel agency has been assigned to assist with hotel bookings. Please email Kaya Mendizabal at Maruata Viajes (maruata@unimedia.net.mx) with a copy to (maruata@prodigy.net.mx) and indicate your requirements for accommodation. Prices are quoted in Mexican Peso and are confirmed upon availability. Please note that 1US\$ is approximately 10.30 Mexican Pesos.

Fiesta Inn (Conference headquarters hotel) - \$800 (fcs)
Holiday Inn Morelia - \$922 (fcs)
Holiday Inn Express - \$747 (continental breakfast included) (fc)
Horizon - \$665 (fc)
Turotel - \$850 (breakfast included) (fc)
Vila Montana - \$1350 (sc)
Vila San Jose - \$960 (sc)
De la Soledad - \$615 (fc)
Virrey de Mendoza - \$1111(fcs)
Los Juaninos - \$1160 (sc)
* (fcs) superior first class hotel, (fc) first class hotel; (sc) standard class hotel

For further information on Morelia and additional accommodation, please visit www.visitmorelia.com

Venue

The Conference will be held in the Centro de Convenciones y Exposiciones de Morelia, the capital city of the State of Michoacan, western Mexico, with the support of the Centro de Investigaciones en Ecosistemas of the Universidad Nacional Aut6noma de Mexico.

GCTE Symposium [1 December 2003]

The Global Change and Terrestrial Ecosystems (GCTE) core project of the International Geosphere-Biosphere Programme (IGBP) will be replaced by a more comprehensive Land Project (jointly with LUCC) at the end of 2003. During the 13 years of operation GCTE has been one of the most active and successful projects of the IGBP, having made many important contributions to our understanding of global change and earth system science. Many world-class scientists participated in GCTE and its acronym is now familiar to global change scientists around the world.

Given the important role GCTE has played, a special one day symposium will be held to mark the end of the project and to highlight its contributions to the international scientific community. This symposium will be held in Morelia, Mexico on Monday, December 1.

A series of presentations will highlight some of the more recent scientific developments that have come out of GCTE projects with particular emphasis on new directions that will become important components of the Land project. We envisage that many prominent scientists who have been affiliated with GCTE projects will attend this event.

GCTE Symposium Themes

- Terrestrial carbon cycle – James Ehleringer, USA
- Ecosystem responses to atmospheric changes – Christian Koerner, Switzerland
- Biodiversity and ecosystem functioning – Shahid Naeem, USA
- Biodiversity and ecosystem functioning – Sandra Diaz, Argentina
- Plant functional types – Sandra Lavorel, France
- Plant migration under global change – Guy Midgley, South Africa
- Vulnerability to invasions – Robert Sutherst, Australia
- Wheat production under future environments, Peter Jamison, New Zealand
-and others to be confirmed